Abbreviations

Units

B billion

Bbbl billion barrels

bbl barrel(s)

Bbo billion barrels of oil

BBOE billion barrels of oil equiv-

alent

Bcfg billion cubic feet of gas bcpd barrels of condensate per

dav

BOE barrels of oil equivalent

bopd barrels of oil per day

cf cubic feet

ft feet

m meter(s)

Mbo thousand barrels of oil

MBOE thousand barrels of oil

equivalent

Mcf thousand cubic feet

mi mile(s)

M thousand

MM million

MMbbl million barrels

MMbo million barrels of oil

MMBOE million barrels of oil

equivalent

MMcf million cubic feet

MMcfd million cubic feet per day

MMcfg million cubic feet of gas

MMcfgd million cubic feet of gas per day

scf standard cubic feet

stb stock tank barrels

T trillion

Tcf trillion cubic feet

Tcfg trillion cubic feet of gas

Chronozones

E Eocene

L Paleocene

LK Lower Cretaceous

LM1 Lower Lower Miocene

LM2 Middle Lower Miocene

LM4 Upper Lower Miocene

LP Lower Pliocene

LPL Lower Pleistocene

LJ Lower Jurassic

MM4 Lower Middle Miocene

MM7 Middle Middle Miocene

MM9 Upper Middle Miocene

MPL Middle Pleistocene

MJ Middle Jurassic

O Oligocene

UK Upper Cretaceous

UM1 Lower Upper Miocene

UM3 Upper Upper Miocene

UP Upper Pliocene

UPL Upper Pleistocene

UTR Upper Triassic

UJ Upper Jurassic

Depositional Style/ Facies

A Aggradational

AP Aggradational/Prograda-

tional

B Biologic (Carbonate)

BC Biologic/Clastic

C Clastic

F Fan

P Progradational

R Retrogradational

S Structural

X Fold Belt

Offshore Areas

AC Alaminos Canyon

AP Apalachicola

AT Atwater Valley

BA Brazos

BM Bay Marchand

BS Breton Sound

CA Chandeleur

CC Corpus Christi

CH Charlotte Harbor

CP Coon Point

DC DeSoto Canyon

DD Destin Dome

DT Dry Tortugas

EB East Breaks

EC East Cameron

El Eugene Island

EL The Elbow

EW Ewing Bank

FM Florida Middle Ground

GA Galveston

GB Garden Banks

GC Green Canyon

GI Grand Isle

GV Gainesville

HE Henderson

HH Howell Hook

HI High Island

KC Keathley Canyon

KW Key West

LL Lloyd

LP Lighthouse Point

LU Lund

328

MA Miami

MC Mississippi Canyon

MI Matagorda Island

MO Mobile

MP Main Pass

MU Mustang Island

PB St. Petersburg

PE Pensacola

PI Port Isabel

PL South Pelto

PN North Padre Island

PR Pulley Ridge

PS South Padre Island

RK Rankin

SA Sabine Pass. Louisiana

SM South Marsh Island

SP South Pass

SS Ship Shoal

ST South Timbalier

SX Sabine Pass, Texas

TP Tarpon Springs

TS Tiger Shoal

VK Viosca Knoll

VN Vernon VR Vermilion

WC West Cameron

WD West Delta

WR Walker Ridge

Acronyms and Symbols

AAPG American Association of Petroleum Geologists

AGA American Gas Association AGF annual growth factor

API American Petroleum Institute

CDP common depth point CGF cumulative growth factor

COST Continental Offshore Stratigraphic Test
CPA Canadian Petroleum Association
DOE U.S. Department of Energy
EIA Energy Information Administration

F5 5th percentile, a 5-percent probability (1 in 20 chance) of there being more than

that amount

F95 95th percentile, a 95-percent probability (19 in 20 chance) of there being more

than that amount

FASPAG Fast Appraisal System for Petroleum AGgregation

FVF formation volume factor

GOM Gulf of Mexico GOR gas-oil ratio

GRASP Geologic Resources ASsessment Program

MMS Minerals Management Service
MPhc marginal probability of hydrocarbons

MPhc,econ marginal probability of economically recoverable hydrocarbons

 $\,\mu\,$ $\,$ mu (a statistical measure of central tendency) is one of the two standard descrip-

tive parameters of a lognormal distribution; it represents the mean of the log-trans-

formed data

N total number of discovered and undiscovered pools

NPC National Petroleum Council OCS Outer Continental Shelf

OGIFF Oil and Gas Integrated Field File

PETRIMES PETroleum Resources Information Management and Evaluation System suite of

programs

PGC Potential Gas Committee

PRESTO Probabilistic Resource ESTimates—Offshore program

PROP proportion of net pay oil

PVT pressure, volume, and temperature

RECG recoverable gas recoverable oil

 σ^2 sigma squared (a measure of the amount of dispersion in a set of data) is one of

the two standard descriptive parameters of a lognormal distribution; it represents

the variance of the log-transformed data

SP spontaneous potential

STP standard temperature and pressure

UCRR undiscovered conventionally recoverable resources UERR undiscovered economically recoverable resources

U.S. United States

USGS U.S. Geological Survey

Table Column Header Definitions

AGE = Paleo Age API = Oil API gravity (API units) - weighted average of all reservoirs in pool/field ASSESSED = Assessed Yes (Y) or No (N) BGI = Initial gas formation volume factor (scf/cf) BLAT = Latitude of pool or field BLON = Longitude of pool or BOI = Initial oil formation volume factor (bbl/stb) CHRONOZONE = Chronozone CUMBOE = Cumulative BOE produced (bbl) CUMGAS = Cumulative gas produced (mcf) CUMOIL = Cumulative oil produced (bbl) DRIVE = Dominant reservoir drive type according to bulk vol-ECO = Eco zone EIAID = Energy Information Administration identification number FCLASS = MMS field classifica-FDDATE = Discovery date (field) FDDATEH = Discovery date of last reservoir discovered FDYEAR = Discovery year FDYEARH = Discovery year of last reservoir discovered FSTAT = Field status (active, expired) FSTRU = See field structure and trap codes following these defi-FTRAP1 = See field structure and trap codes following these definitions FTRAP2 = See field structure and trap codes following these definitions

GOR = Gas-oil ratio (mcf/bbl) GR TAREA = TAREA multiplied by growth factor GR TVOL = TVOL multiplied by growth factor GRECG = Gas reservoir recoverable gas (mcf) GRECO = Gas reservoir recoverable oil (bbl) GRF = Gas recovery factor (dec-GROWTH_F = Growth factor GRP = Produced GOR for gas reservoirs (mcf/stb) GTHK = Average net gas thickness (ft) GVOL = Gas volume (acre-feet) MMS_FIELD = MMS Field NCNT = Nonassociated reservoir count OAREA = Total oil acreage (acres) OIP = Technically recoverable oil in place (bbl) based on avail-ORECG = Oil reservoir recoverable gas (mcf) ORECO = Oil reservoir recoverable oil (bbl) ORF = Oil recovery factor (deci-ORP = Produced GOR for oil reservoirs (mcf/stb) OTHK = Average net oil thickness (ft) OVOL = Oil volume (acre-feet) P_U = Proved (P), Unproved (U), or Non-assessed (N) PDDATE = Discovery date of first reservoir discovered PDDATEH = Discovery date of last reservoir discovered PDYEAR = Discovery year of first reservoir discovered PDYEARH = Discovery year of last reservoir discovered PI = Initial pressure (psi) weighted average of all reservoirs in pool/field PLAREA = Offshore planning PLAY NAME = Play name

PLAY_NUM = Play number PLAY_TYPE = Type of play POOL NAME = Field Name POROSITY = Average Porosity (percent) PROP = Proportion oil (decimal) RECBOE = Total original recoverable BOE (stb) RECG AF = Recoverable gas per acre-foot (mcf/acre-foot) RECGAS = Total original recoverable gas (mcf) RECO AF = Recoverable oil per acre-foot (bbl/acre-foot) RECOIL = Total original recoverable oil (stb) REMBOE = Remaining proved BOE (stb) REMGAS = Remaining gas (mcf) REMOIL = Remaining oil (stb) RESTYP = Dominant reservoir RSI = Initial solution gas-oil ratio (scf/stb) SCNT = Saturated reservoir count SDCOUNT = Sand count SDPG = Sand pressure gradient (psi/ft) SDTG = Sand temperature gradient (f/100ft) SPGR = Gas specific gravity (decimal at 60 degrees F and 15.025 psia) - weighted average of all reservoirs in pool/field SS = Subsea depth (feet) weighted average of all reservoirs in pool/field SW = Water saturation (decimal) - weighted average of all reservoirs in pool/field TAREA = Total acreage (acres) THK = Average sand thickness TI = Initial temperature (degrees F) - weighted average of all reservoirs in pool/field TOT_BOE = RECBOE multiplied by growth factor TOT_GAS = RECGAS multiplied by growth factor

GAREA = Total gas acreage

GIP = Technically recoverable

gas in place (mcf) based on

(acres)

available data

TOT_OIL = RECOIL multiplied by growth factor

TRCNT = Total reservoir count TREND - Trend

TVOL = Total volume (acre-feet)
- weighted average of all reservoirs in pool/field

TYPE = (O)Oil, (G)Gas or (B)Both

UCNT = Undersaturated reservoir count

WDEP = Water depth (feet) weighted average of all reservoirs in pool/field

WELLAPI = Discovery well API YIELD = Yield (stb/mmcf) - gas reservoirs' recoverable condensate divided by recoverable gas, weighted average of all gas reservoirs in pool/field

Field Structure and Trap Codes

FSTRU = The overall structural style of a field as designated by the following single digit code.

A = Anticline

B = Fault

C = Shallow Salt diapir: 0-4,000 ft subsea

D = Intermediate salt diapir: 4,000-10,000 ft subsea

E = Deep salt dome: >10,000 ft subsea

F = Salt ridge

G = Shale diapir

H = Unconformity

I = Stratigraphic

J = Reef

K = Rollover into growth fault

L = Rotational slump block

M = Non diapiric Louann Salt

N = Thrust Fault

U = Unknown/Other

FTRAP1 = The primary or major trap component of a reservoir as designated by the single digit code, below.

FTRAP2 = The secondary or minor trap component of reservoir as designated by the following single digit code (FTRAP1 and FTRAP2 use the same letter code).

A = Anticline

B = Faulted anticline

C = Rollover anticline into growth fault

D = Normal fault

E = Reverse fault

F = Turtle structure

G = Flank traps associated with salt or shale diapirs

H = Sediments overlying diapirs

I = Caprock

J = Updip facies change

K = Updip pinch out

L = Permeability trap

M = Onlap sands

N = Angular unconformity

O = Barrier Reef

P = Patch reef

Q = Subsalt trap

U = Unknown/Other

Data Files Information

Tabular Data

Tabular data for this report can be found in the Data Files directory on the CD. Tabular data files are formatted in Excel 97 (.xls) and tab delimited ASCII (.txt). For those without any spreadsheet software, we have included the Excel 97 Viewer in the Software directory on the CD (Software/Microsoft Excel Viewer/xlViewer.exe). This free software from Microsoft will enable the user to view the .xls files, but not to edit, query, or sort them.

Eight tabular data files are included on the CD:

- **GrownReserves** = reserves growth database by pool as of 1/1/ 99 (.xls and .txt formats),
- Summary Sheets 2000 Resource
 Assessment.xls = endowment and reserves summary by play and summary by water depth.
- **99naTBLS.xls** = pool characteristics, economic results, and miscellaneous tables,
- **fldna99** = field level data as of 1/1/99 (.xls and .txt formats),
- pool99 = pool level data as of 1/1/ 99 for assessed pools (.xls and .txt formats),
- Reserves_by_Play.xls = tables of individual reserves and resources by play,
- **cumgrpoolplot.xls** = plots of cumulative grown reserves by discovery order,
- Field-PoolData.xls = discovered and undiscovered field and pool BOE total endowment (mean, 95th, and 5th percentile).

Separate pool and field data files include the same source data that have been variously grouped, summed, and averaged for the convenience of the user. All pools are weighted by bulk volume of individual reservoirs. This

averaging emphasizes the attribute values of reservoirs having the most original oil or gas in place. If the reservoir contains both oil and gas, then gas is converted to barrels of oil.

PowerPoint Graphics

Price-supply curves and exploration history graphs are also provided in the Data Files directory as Microsoft Power-Point presentations (.ppt). For those without PowerPoint software, we have included a PowerPoint viewer in the Software directory (Software/Microsoft PowerPoint Viewer/ppview97.exe). free software Microsoft will enable the user to view the graphs, but not to manipulate or extract data from them.

Three PowerPoint files are included on the CD:

- Gulf of Mexico Price Supply
 Plots.ppt = price-supply
 plots for the GOM that
 appear in the Economic
 Results section of the
 report.
- Atlantic Price Supply Plots.ppt
 = price-supply plots for
 the Atlantic Region that
 appear in the Economic
 Results section of the
 report.
- Pool ExpHistpptPlots.ppt = exploration history plots that appear in established play write-ups.

GIS Data

Map outlines of plays, cultural map data, and field and pool polygons are provided as geographic system (GIS) shape-files (.shp). Field and pool shapefiles are linked to their respective data tables. The shapefiles are located in the GIS

Data directory and are formatted for use in ArcView 3.2a. For those without ArcView software, we have included ArcExplorer, a GIS data viewer. This free software from ESRI is located in the Software directory (Software/ESRI ArcExplorer/ae2setup.exe).

Three folders are located in the GIS Data directory. The first, General Data, contains cultural map shapefiles such as OCS block boundaries, coastlines, and shipping fairways. Other shapefiles include contour lines at intervals used in the report's play and economic area maps.

The second folder, Play Outlines, contains the play boundary shapefiles that were used in the report's play maps. Each play boundary encloses the prospective area for a play, and contains "hydrocarbon limit" polygons. Hydrocarbon limits are those areas within a play that have discovered resources.

The third folder. Field and Pool Data, contains outlines (polygons) for pools in each play and field outlines that are linked to the pool99 and fldna99 tabular data files. A "pool" is a discovered or undiscovered hydrocarbon accumulation, typically within a single stratigraphic interval. Because both the pool and field polygons are linked to their respective data tables, tabular data can be displayed on screen, and both the tabular data and accompanying graphic data (polygons) can be queried. Attribute definitions are the same as those presented in the "Table Column Header Definitions" on page 631.

Pool polygons were aggregated to make the field polygons. A field may contain more than one pool and may

consist of more than one polygon. When graphically querying a field consisting of several separate polygons, each polygon will yield the same data for the field; therefore, it is not necessary to sum data from each polygon.

All GIS data are presented here in latitude and longitude decimal degrees, NAD 27. It is inappropriate to use this projection of data for volume or area analysis. Volumetric measurements of pools and fields are presented in the tabular data files. To use the GIS files for accurate measurement, graphics files would first need to be converted to a true cartographic projection. Note that map data have certain tolerances for accuracy (scale, degree of generalization) or other specific limitations. Play boundaries are drawn on the basis of well data available as of January 1, 1999.